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YELLOW DAY LILY



MAY, 1886.

THE MONTH OF MAY is the principal planting season in the garden for a large region of this country. Although some hardy crops were got in last month, and much preparatory work has been done in the way of starting seeds and raising small plants, the present month is the time through all the North when the final shift of such plants to the open ground takes place, and, also, when the seeds of many of the more tender plants are first committed to the soil. It is, therefore, a month of earnest toil and of no little anxiety, for the fear of unseasonable frosts is ever present until summer fully arrives. In the vegetable garden Beans, Sweet Corn, Beets, Carrots, Parsnips, Salsify, Cucumbers, Melons and Squashes can now be planted, selecting the proper time, according to the climate of the locality. In Western New York the usual range of this season is from the fifth to the twentieth of the month. At the same time such plants as Cabbage, Cauliflower, Celery, &c., that have been raised in the greenhouse or hot-bed and hardened off in the cold-frame, or otherwise, are now transplanted. The state of the weather is keenly watched, for an hour's frost may spoil weeks of work; hand-glasses, muslin-covered frames and boxes, and old newspapers, assume a transient interest for the protective purposes they may serve in a sudden emer-

gency. Further south, in a warmer climate, where many kinds of hardy plants are well advanced, later sowings and plantings can now be made for successive crops.

This is the most desirable time for sowing flower seeds in the open ground, for planting many kinds of flowering bulbs, and for setting bedding plants. The weather for months past has been characterized by great fickleness of temperature, the changes being both sudden and extreme; taking advice, therefore, of our knowledge of this peculiarity, it will be wise to operate cautiously, both by carefully providing means of protecting newly set plants by putting out the hardiest and least valuable soonest, and reserving the very tender and most valuable kinds to the latter part of the season. With all tender plants we should wait until the ground is warm and the weather apparently settled before planting; but it is necessary to have for them a rich, deep soil that their growth may be pushed rapidly. Judging from the state of the weather at this time, April 8th, with several inches of snow on the ground, it is probable that most of the trees procured from the nurseries of Western New York will not be reset until early in May, and, as a rule, we think that more trees are transplanted every year, in the Northern States, in the

first week of May than in any other week during spring. The appointment of an arbor-day in this State is now under consideration, and some difference of opinion has been expressed in regard to the most suitable time. One fact should be kept in mind, that the observance of an arbor-day is primarily intended to promote an interest in tree-planting, to keep prominent the importance and usefulness of the practice. It is a day to celebrate tree-planting rather than actually to perform it. In the nature of the case many conditions will make most suitable, and even necessary, various days and times for transplanting to be performed. The weather, the latitude, the condition of the soil, the possession or non-possession of the trees to plant, business arrangements, and a hundred other circumstances may intervene and control the time when tree-planting is performed. But the celebration of an arbor-day can be general, and no day is more suitable for it than the first day of May with all its historic associations, for it is at or near tree-planting time, which may precede or follow it in different seasons and in the different parts of the State; even for a great area of the country, if not for all of it, it would be equally as appropriate. If one day could become general throughout the country to celebrate the practice of tree-planting—an anniversary arbor-day—it would greatly promote the interest of forestry, and the adornment of home grounds by the planting of trees and shrubs.

The increasing attention now being paid to hardy herbaceous plants in the garden makes it possible to give advice with some probability of its acceptance on a subject in regard to which instruction is often sought—the plants that will succeed in a shady spot. Such places are those under high walls or in the shade of tall trees. A position directly beneath the foliage of trees is suited to a smaller number of plants than a shaded spot not over-hung, but with the free sky above. The plants in the following list can be used for this purpose, many of them can be procured in the trade but others must be sought only where they are growing wild, and many of our readers are situated so that they can find them out and procure them in their native homes.

Actæa spicata, or Baneberry, both the red and the white berried varieties.

Adonis æstivalis, *A. autumnalis* and *A. vernalis*, the spring, summer and autumn Pheasant's Eye.

Anemone nemorosa, or Wood Anemone, and *A. Hepatica*, or Hepatica triloba, or Liverleaf.

Asperula odorata, or Woodruff; this plant is sometimes planted under Arbor Vitæ, Spruces and Pines, to cover the bare ground that is usually seen at their base.

Arum Dracunculum and *A. Italicum*.

Anemone Japonica, or Japan Anemone, of both the white and red-flowered kinds.

Apios tuberosa, or Ground Nut.

Aquilegia of different species, but *A. Canadensis* is the most reliable.

Astilbe Japonica.

Bellis perenis, or the common Daisy and its varieties.

Clarkia of different species.

Convallaria majallis, or Lily of the Valley.

Dicentra cucullaria, the White Ear Drop, *D. exima*, the Purple Ear Drop, and *D. Canadensis* or Squirrel Corn, also the exotic species, *Dicentra spectabilis*, or Bleeding Heart.

Epimedium alpinum, or Barrenwort.

Erythronium Americanum, or Yellow Dog's Tooth Violet, and *E. albidum*, the White Erythronium.

Eupatorium ageratoides, often cultivated in greenhouses for its white flowers, but a hardy native.

Ferns, native species, but particularly *Onoclea sensibilis*, the Sensitive Fern; *Onoclea struthiopteris*, or as it is more commonly known, *Struthiopteris Germanica*, the Ostrich Fern; *Asplenium filix-fœmina*, or Lady Fern; *Aspidium acrostichoides*, or Holly Fern; *A. marginale*, or Marginal Shield Fern, and *A. spinulosum*, the Bristly Shield Fern.

Gilia androsacea, a pretty California plant.

Linnæa borealis, or Twin Flower, especially adapted to northern regions and elevated localities.

Mertensia Virginica, or Virginia Lungwort.

Mitchella repens, or Partridge Berry, a well known creeping, evergreen plant, bearing whitish flowers and red berries.

Mitella diphylla, or Mitrewort.

Nemophila, different varieties.

Orobus, or Bitter Vetch, particularly the species *lathyroides* and *vernus*.

Polygonatum biflorum, or True Solomon's Seal.

Saxifraga Virginiensis, or the Early Saxifrage, also the exotic species *crassifolia*, *lingulata* and *Siberica*.

Scutellaria macrantha, or Japanese Skull-cap, bearing blue flowers.

Smilacina racemosa, and *S. stellata*, two species of False Solomon's Seal.

Streptopus amplexifolius, or Claspingleaved Twistfoot.

Tiarella cordifolia, or Bishop's Cap.

Uvularia grandiflora, or the Large-flowered Bellwort.

Vinca minor, the common Blue Periwinkle, and *V. major* and its varieties.

Viola pubescens, *V. Canadensis*, *V. cucullata*, also *V. odorata*, the Sweet or English Violet.

Whitlavia grandiflora and its varieties.

Although others could be named for the same purpose, it will be found that those mentioned here are more than ordinarily interesting in foliage or flowers or both and the list is long enough and

the plants sufficiently varied to meet all garden requirements for shady places.

The *Fuchsia* is an excellent summer plant for shady places, especially near the house and in other conspicuous spots.

The Bourbon, Tea and Polyantha Roses can also be relied upon in the same situations for a large amount of bloom.

The filling of baskets and vases will require attention this month. Baskets after filling can be moved about, kept inside during all hot weather, and otherwise cared for so as to insure the welfare of the plants; but large vases can be filled not much earlier than the time that tender plants can be bedded out without danger of frost, though some protection at night can be given with paper and cotton sheets.

On every hand the gardener will now find something to engage his attention, and it will be only by careful planning for each day's work, and steadily performing as designed, that he can satisfactorily accomplish what lies before him.

NARCISSUS AS A POT PLANT.

Less attention is given to the *Narcissus* as a winter flowering plant than its merits entitle it to. We consider it quite as desirable for this purpose as the *Hyacinth*, and as easily raised. The flowers are of beautiful form and exquisite fragrance, and with proper management can be had in constant succession for several months. The Paper White and the Double Roman are the varieties most largely raised by florists for early blooms, coming in about the winter holiday season. All the varieties of *Polyanthus Narcissus* are beautiful as pot plants and bloom abundantly. Our engraving shows a plant, reduced in size, of *Grand Soleil d'Or*, with a single flower nearly full size. A well-grown plant of it in full bloom is a delightful object. The drawing was made from a plant raised the past winter in a cottage window. In this climate we have little opportunity of seeing the *Polyanthus Narcissus*, except as we raise the plants in pots, as they are too tender for this region, for even with the best protection they will but seldom come out in the spring unharmed; it is an exceptional winter that allows them to pass through

uninjured. At the North, therefore, they are seldom planted in the open border; in the latitude of Philadelphia and southward they can be successfully planted out. Besides the *Polyanthus Narcissus* the other varieties of Single *Narcissus* and the *Jonquils* are excellent pot plants, some of the most desirable of them being the Hoop Petticoat variety, *Etoile d'Or*, *Poeticus* or the Poet's *Narcissus*, the Gold and Silver Trumpet, the *Campanel* or Great *Jonquil*, and the Single Sweet-scented *Jonquil*.

A medium-sized pot, or one five inches across, will hold three bulbs. These should be set so that the neck of the bulb is at the surface of the soil. Rich sandy soil should be used, and after potting and watering, set the pots away in a dark or shady place where a steady cool temperature can be kept. Here the bulbs will make roots, and when the pots are filled the plants can be brought to the light and a higher temperature will soon call out the leaves. Enough bulbs should be potted to allow them to be brought forward from week to week for some time, thus lengthening their season. A cool



NARCISSUS GRAND SOLEIL D'OR.

part of the greenhouse and a cool window are equally suitable places for their development. There is no sweeter or more easily managed window plant. Inexperienced persons often make the fatal mistake of potting these bulbs and those of Hyacinths and other Dutch bulbs and placing them immediately in the light and in a high temperature. The result is that the foliage is forced out, the roots are undeveloped, and the bulbs are exhausted without blooming.

Narcissus bulbs are also bloomed in vases of water, like Hyacinths, or in baskets of moss. In raising them in either of these ways it is as necessary as when the bulbs are in pots of soil that the roots should first be formed, and to do this the bulbs must be kept in the dark, in a low temperature.

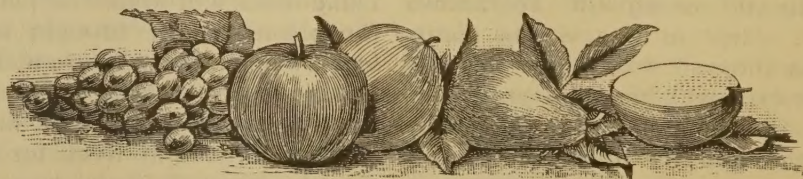
Grand Soleil d'Or, the subject of our engraving, is a clear, bright yellow with deep orange cup, and very fragrant. To contrast with this variety a good selection is Grand Monarque, a pure white flower with a yellow cup; it produces splendid spikes of flowers, often as many as eighteen or twenty blooms. *Gloriosum superbum* is a white flower with a deep orange cup, and equally as desirable as the last.

Bulbous plants should form a very conspicuous feature of window gardening.

THE YELLOW DAY-LILY.

This hardy plant, *Hemerocallis flava*, is to be found in some old gardens, but is comparatively rare. It deserves, however, to be very generally cultivated. It is a native of Siberia, and is thoroughly hardy, at least where protecting snows cover it through the cold season. The flowers are borne freely in early summer, and the blooming season continues for a long time. Though the individual blooms do not last long, as its common name indicates, yet on a shady border they appear in good condition a number of days. The botanical name, *Hemerocallis*, is from *hemera*, a day, and *kallos*,

beauty. The flowers are a clear canary yellow, of one shade both within and without, and of the sweetest fragrance. The plant is a vigorous grower, producing its leaves abundantly, and is best suited with a strong, rich soil. The appearance of the plant improves from year to year, as the clump increases in size, and it should not be often disturbed. Propagation is effected by division of the roots. There is no difficulty about the cultivation of this plant; all it wants is a suitable spot of ground and freedom from weeds, for all else it will take care of itself. It is one of the best hardy border flowers.



CORRESPONDENCE.

WINTER-BLOOMING GERANIUMS AND THEIR TREATMENT.

A great many persons say to me: "How is it that you manage to have your Geraniums bloom in winter? We have tried, time and again, but from December to March our plants have no flowers. We take good care of our plants. They have good soil to grow in, plenty of light and are kept from frost. The fault does not seem to be ours. They grow well, but the flowers that we want are not produced. You must have a peculiar knack—tell us what it is."

All the "knack" there is about having plenty of flowers on Geraniums through the winter, consists in selecting proper varieties and giving them a somewhat different treatment from that given summer flowering Geraniums. I am convinced, from some years' experience with this class of plants, that the principal reason why so many fail to obtain flowers in winter is, that they do not take pains to select winter-blooming varieties, or, at least, such varieties as have a tendency to bloom at all seasons of the year. If they have a kind which proves satisfactory during the summer, they try to make a winter-bloomer of it, and generally fail. Sometimes these varieties will bloom occasionally during winter, if not allowed to exhaust themselves by summer flowering, but they are very unsatisfactory as a general thing.

My present collection of Geraniums for winter flowering is the result of careful selection and experiment during the last five years. I have discarded all but those which bloom well, and I have also rejected all inferior kinds, aiming to have my collection a choice one. All the varieties I grow have fine, well-shaped flowers of choice colors, and are all that can be desired as to style of growth and habit of blooming. The varieties in my collection are as follows:

Avenir National; beautiful rosy-crimson, large flower and constant bloomer.

Mrs. James Vick; white, with pink center; fine truss and flower, and the best of its class.

Mrs. Moore; white, with salmon spot on base of each petal; very profuse.

Mary Hallock Foote; salmon, with white eye, a fine flower and great bloomer.

Pauline Lucca; pure white, exceedingly beautiful.

Marmion; very large perfect flower, of rich scarlet.

Rienzi; bright scarlet, a constant bloomer.

Among the doubles I have but three which I can depend on for winter flowers, these are:

Bishop Wood; scarlet shaded with violet.

Crimson Gem; rosy crimson.

Ministre Constans; pale, soft pink, shading to salmon.

The Bishop Wood will bloom the year round if one allows it to.

I do not allow these plants to bloom much during summer. In June I cut them back severely and put them on the veranda. I give only enough water to keep them from drying up. I do not encourage growth, I merely aim to keep them at rest in a healthy condition until September. Then I repot them. I always use old plants; I do not have one-quarter the flowers from a new plant—by that I mean a plant started in spring—that I succeed in getting from a plant a year or two old. After the repotted plants become well established, I give a stimulant, but never oftener than once a week. I use the Ammoniated Food for Flowers, and that only. It is something that can be depended on, is cleanly and convenient to use. It induces a strong, vigorous growth, and I have never had a plant become unhealthy under its application.

Geraniums treated as above, soon begin to put out many robust branches, and by pinching these in when they have attained a growth of a few inches, new ones will be induced to start at each joint. By the time the plants are brought into the house they will be covered with growing points, and by December they

will begin to bloom. From that time until June I have plenty of Geraniums. The plants would bloom all summer if I would let them, but I prefer to have them rest and store up blossoming energy for next winter.

I have some Geraniums that are six years old. They have from eight to a dozen stalks apiece, these stalks springing from the base of the plant, and each stalk divided into many branches. By

cutting back the plants each year, I have made them very compact. One such plant has a dozen times the blossoming surface that a young plant can have. A great many florists—and not all of them amateurs—will tell you you must have young plants if you would succeed. I do not understand why this belief is so prevalent. My experience convinces me that the two and three-year-old plants are best.

EBEN E. REXFORD.

ARROWHEAD HOT SPRINGS.

An east bound traveler from Los Angeles on the Southern Pacific R. R., will notice, shortly after crossing into San Bernardino County, that the attention of the passengers is fixed on some object of absorbing interest. If he joins the curious



observers he will see on the mountain side far before him the semblance of an Indian arrowhead, apparently a figure of granite, that stands out in bold relief from the dark chaparral of the mountain; this strange symbol is plainly visible for a distance of twenty-five or thirty miles. At the

base of Arrowhead Peak bubble forth a large number of hot springs, possessing exceptional curative properties. Arrowhead is about six miles from San Bernardino, the bustling county seat, and daily stages meet the trains. It is a pleasant drive, particularly so after the level valley is left behind, and the road winds about among the foot-hills. For much of the way there is only room for a single track, and the heights above and the yawning chasm at the right remotely brought to mind the approach to Yosemite; although, in place of those incomparable Pine forests crowning every mountain side, and the six horses dashing forward while the driver flourishes his longwhip, and the tourists clinging to their seats in an agony of fear, these hills are only covered with a thicket of low bushes,

and the stout horses plod along so sensibly that one loses all apprehension in the enjoyment of the mountain view that changes with each succeeding turn. At last, the stage rumbles over a bridge spanning the Hot Spring Canyon, then creeps up a long, steep hill to the hotel. Just back of it is the Arrowhead, with its apex pointing downward toward the springs. The outline would be perfect were it not for a "washout" on the left side, made by the heavy rains two years ago, which slightly mars the contour. It is not a rock formation, as I had supposed, but is made by a peculiar growth of White Sage, which has taken this singular shape. As I looked at it, standing out boldly from its dark background, it seemed impossible to me that it could be a growth of vegetation. But there is a trail leading to the summit of Arrowhead Peak, and parties from the hotel frequently make the ascent. So I could not dispute their asseverations, but merely regretted that my short stay forbade a trip of personal investigation. This Arrowhead Sage garden covers about five acres in extent, and its length is one thousand three hundred and twenty feet, and greatest width three hundred and fifty feet.

Many Indian legends cluster around this singular mark, and one of the most graceful has been told in verse, after the fashion of Hiawatha. It commences with a description of the good gifts of Manitou, the Mighty, to his children, who, as they became prosperous,

"Boastingly forgot His presence.
Then Great Manitou, the Mighty,
Sent a spirit from the sun-land,
Who drank all the streams of water,
Drank and dried them with his hot lips,
Leaving only the salt ocean."

Then all the tribes gathered in council, and a mighty prayer for relief went up to the Great Spirit.

"One there came in answer to them,
But it was a loathsome monster
Bringing pestilence and famine.
A huge serpent winding, winding,
Till his coils were all around them.
Fiery breath consumed the valley,
Fiery folds enwrapped the mountains."

In utter despair, the remnant of the tribes again met in council and implored the Great Spirit to name an offering that would rid them of this terrible monster. At last their answer came, borne on the pinion of White Eagle:

"Ne-wah-nah, the fairest maiden,
Give an offering unto heaven."

Ne-wah-nah was the chieftain's only daughter, beloved by all and tenderly guarded

"Lest the famine should come to her,
Lest the plague should blight her beauty,
Lest the fever and the terror
Should envelop her and slay her."

But to save his people and land from destruction, the chieftain took his lovely daughter,

"Wrapped her choicest robes around her,
Wrapped her in them as an infant,
Hastened quickly from the wigwam,
Gave her to the writhing monster.

* * * * *

When the sacrifice was finished,
A swift arrow out of heaven
Pierced the monster; then another
Lightning arrow, and another.
The last arrow struck the mountain,
Broke, and rested there forever.
When the monster died, a fountain
Clear and warm came ever flowing;
Many crystal streams came pouring,
And the chieftain called the people,
All that were not dead or dying,
Pointed to the broken arrow,
Pointed to the healing waters;
Made a dance and joyous council
For the healing of the nations.
Now, the people, torn and scattered,
Wander, wander o'er the mountains;
But for many moons their dwellings
Were anear the crystal waters,
Ne'er beyond sight of the broken
Arrowhead above the waters."

The site of Arrowhead is highly picturesque; the broad verandas command a charming outlook on mountain and valley; a little canyon winding back of the house conceals clumps of feathery Ferns along the mossy banks of its tinkling stream, and there are various drives and walks and trails leading to points of interest. But delightful as is the place and its surroundings, it would never have reached its present popularity without its famous mineral waters and mud baths. There are a good many springs in the immediate vicinity of the hotel, some of them having a temperature of 193° Fahr. The water has been officially analyzed, and is very similar to that of the celebrated springs of Carlsbad, in Bohemia, where the short season of two months brings fifteen thousand visitors. At Arrowhead the season lasts the year round. The water is very pleasant to the taste, and has a higher temperature than any other spring in the State. I can testify personally to the heat of the

water, for the memory of my scalded mouth is still painfully distinct.

Iron pipes are laid throughout the building, which is warmed by the natural heat of the water as it runs through them, just as it comes from the springs. The hot water is constantly running in kitchen and laundry. "There is plenty of it. Why should we save it when there is more than we can possibly use?" asked the merry landlady, when we spoke of the seeming waste.

The bath-rooms are models of neatness and comfort. We were shown a steam bath directly over a boiling spring, but one gasp of the hot vapor was enough for me. The mud baths are in a separate building a few rods distant from the hotel, and are said to be very efficacious in cases of rheumatism, neuralgia and skin diseases. The coffin-like pits half filled with mud are repulsive to look at, but the guests say that there is nothing so soothing to tired nerves, nothing that will drive away pain like a mud bath. The testimony of former cripples who

have thrown away their needless crutches ought to be convincing. I was willing to take it all on faith, having no desire in this case to corroborate it by personal experience.

Arrowhead is a charming place, and well deserves its great popularity. It is frequented by a pleasant class of people, and all connected with the house are so attentive that one feels like a member of a large family rather than a stranger at a hotel. A few miles from Arrowhead the new colony of Irvington has sprung up, which is destined to become a favorite locality for the homes of sufferers from rheumatism, neuralgia and pulmonary diseases. Out of door life, in the pure dry mountain air, will give fresh vitality to many a one who has long been considered a hopeless invalid, and the accessibility of the springs makes it practicable for those who wish to take a course of mineral waters, or mud baths, to do so and still remain among the comforts and associations of home.

ALICE P. ADAMS, *Alhambra, Cal.*

THE GLOXINIA—PRIZE ESSAY.

Notwithstanding the fact that the Gloxinia is assigned a place among stove plants in sundry catalogues, and is, undoubtedly a native of a very hot climate, it is one of the most satisfactory flowers known for window as well as greenhouse culture, requiring comparatively little care and attention in return for its brilliant blossoms and scarcely less beautiful foliage. The great variety of form and color exhibited in its flowers entirely precludes the idea of sameness, and gives to the cultivator the pleasure of ever looking forward to the development of new beauties in the growing plants. Of course, new varieties usually originate in seedlings, as the Gloxinia is not like the Petunia and many other flowers, inclined to sport. Any desirable kind can be propagated from leaf-cuttings, which strike readily, and will produce flowering bulbs for the following season.

The materials requisite for the growing of the Gloxinia from seed are really very few. First on the list is good seed, and I much prefer that ripened in summer or autumn for sowing the ensuing spring to that which is of greater age, as I do not think, judging from experience, that

Gloxinia seeds retain their vitality so long as many other kinds. Secondly, a quantity of pure leaf-mold, as I confess to the heresy of not even requiring the prescribed leaven of sand for the growing of this plant to the size required for pricking out into pots. If, however, the leaf-mold cannot be obtained, then add a "dash of sand" to the mellow earth which must be used as a substitute. I like the leaf-mold better than any compost, no matter how nicely prepared, for, in the first place, when once saturated with water it retains the moisture for a long time, thus rendering unnecessary the frequent waterings so dangerous to tiny germinating seed, and, in addition to this, the leaf-mold, while so fine and soft that the smallest rootlet can easily push its way through it, is not porous, so that there is little danger of its swallowing the minute seed into fatal depths. Next in order comes the receptacle for the mold or earth in which the seeds are to be sown. For this purpose use a shallow box, not over three inches in depth, a cigar box the bottom of which has been perforated with an awl or small gimlet, in order to admit water freely, will answer



admirably and can be easily procured. These few articles, together with a pane of glass, constitute the most important accessories to Gloxinia culture in its first stage, if we do not take into account the rather indispensable elements of air, heat and water, without which the most sanguine horticulturist would hardly hope for success.

Sowing in February and March is recommended for the greenhouse, but I would advise those who wish to try window culture not to sow until the cold weather is well over, unless they are sure that they have facilities for preserving an even warm temperature for their experiments, and this is rarely possible in the dwelling house, as I find to my cost. Therefore, I think, under these circumstances, it is best not to sow until the last of April or first of May. There is little to be gained

by sowing earlier, as plants from seed sown at this season have ample time to mature strong flowering bulbs for the next year.

To return to our subject. Having sifted the mold or earth to remove any coarse particles, fill the box within half an inch of the top with it, and press it down as firmly as possible, leaving an even surface. Set the box in a pan containing tepid water, and let it remain until the soil is thoroughly saturated, then remove and allow any superfluous water to drain off. Afterwards scatter the seeds thinly over the surface and sift a little fine earth over them through a sieve or coarse piece of muslin; cover the box with the pane of glass and set it in a warm place to await the process of germination. If in the greenhouse this is easily managed, but if in the dwelling house a shelf near the stove or a warm window will do nicely. I have even found the reservoir of my kitchen stove an acquisition for furnishing bottom heat to struggling plants. In case of using a reservoir for this purpose it is well to put a bit of board under your box, as a non-conductor, in event of too much heat. Give air frequently to prevent mold, and should water be necessary before the plants are up set the box again in a little warm water until the moisture appears on the surface of the soil. As soon as the seedlings are nicely up remove the glass and place the box in some warm location, where the plants may have the benefit of both light and air to prevent them from becoming drawn, and continue watering as before until they attain the dignity of from three to five leaves, when it is time to transplant each one to a small pot of rich, mellow earth, or several may be set in a larger pot and allowed

to remain until they attain a height of an inch or so, when they may be transplanted to four-inch pots, and a few weeks later into six-inch pots, where they are to be left to complete their growth of the first year. Water as often as the



GLOXINIA—UPRIGHT FLOWER.

earth becomes dry, but be sure that your pots are well drained, as, though the Gloxinia will endure a great deal of neglect in the matter of applying water, a deluge was not more fatal to the antediluvians than it will prove to this pretty flower. Stagnant water soon destroys the bulb beyond remedy. Do not place your plants, especially during the blooming period, in the direct rays of the summer sun, or they will be apt to droop and become limp, pitiable objects, but give them a little protection and they will reward you well for the trouble. They will do nicely with plenty of light and little, if any, sunshine, and are, therefore, to be recommended for those who have windows on the north or east side of the house.

While those who sow seed in the greenhouse may possibly be rewarded by a few flowers the first season, it is well for those who grow them under the disadvantage of the dry air and unequal temperature of the living-room not to expect any until the second year, or disappointment will likely result. Allow your young plants to grow until the tops show signs of ripening off, or till late in the autumn, if they seem inclined to do so,

then gradually withhold water and put them, after the foliage is well dried off, beneath the staging, if in the greenhouse, or, if under house culture, in some warm and comparatively dry place where there is no danger of frost through the winter. I have a box which covered with cretonne presents quite a respectable appearance in the sitting-room, and at the same time serves as a receptacle for my dormant plants until such time as their starting shoots or my own convenience decides me to place them in the window again. One method of preserving the roots during their period of rest is that of packing them in sand, but I feel more certain of success if I allow them to remain undisturbed in the pots in which they were grown, for experience warns me to be careful how I meddle with the dormant bulbs, although the growing plants can be repotted at any time, and even subjected to very rough treatment without much injury.

When the Gloxinias show signs in the spring of waking from their long sleep into active life by the putting out of sun-dry pink or green shoots, remove them from their resting place to a warm window, and water carefully, but not too freely, until the foliage is well out; then



GLOXINIA—NODDING FLOWER.

take the plants up and shake the earth out of their roots, repotting into six or seven-inch pots, and using very rich, mellow earth or the compost usually recommended for house plants; now set the plants in the window where they are

to bloom. Always be careful not to over water for some time after repotting, as when the roots have been recently disturbed they are not in a condition to take up water as when well established in the soil. Do not spot the leaves or blast the flower buds by getting them wet, but pour the water directly on the surface of the earth, using sufficient to penetrate to the bottom of the pot and thoroughly wetting the contents. It is far better to water thoroughly and only when necessary than to keep up a constant irrigation, and I might add irritation, of the surface of the soil with homeopathic doses of water, leaving the roots deep down in the pot to shrivel and die from starvation, or rather, of thirst, while you indulge in the "pleasant fiction" of watering your plants once or twice every day. The old saying, "What is worth doing at all is worth doing well," applies very nicely to even the simple operation of watering a plant.

It is an easy matter to keep the *Gloxinia* in bloom from May until October or November, by starting the plants into growth "in succession." The buds usually appear, under favorable circumstances, the second season as soon as the plants have put forth a few leaves, and the flowers often remain a week or more before falling off, thus adding another good point to the many already scored in the favor of this beautiful exotic. The *Geranium* is looked upon as the plant which "suffereth all things, endureth all things," and generally fulfils any expectations in that respect, but after a long experience I can recommend the *Gloxinia* to plant-lovers as being nearly, if not quite, as easy of cultivation as this well known flower, while, in addition to this, its waxen bells, with their colors gorgeous as the plumage of a tropical bird or delicate as an artist's dream, proclaim it as one of the aristocracy of the floral kingdom.

MRS. H. R. LUNNEY, *Hoosick, N. Y.*

WHAT TO HAVE IN THE GARDEN.

The winds have a winter chill, though a spring shrillness is in their sound. One may well be content that warm weather delays till all that important part of gardening is over that must be done on paper. For a garden, though stocked with old favorites and conservative in its metes and bounds, should have some touch of variety each season, to give a fillip to its pleasures, if it were only for the delight of planning. All the year the process goes on, instinctively, of caring and providing for the garden. With an eye always to the florists' windows, and the run of the flower shows, besides some good garden reading, there is always novelty enough ahead to keep the zest of this pursuit.

I don't know why it is that pleasures from natural objects never seem to pall upon one, and if SOLOMON tired of his kingly garden, it was because he only looked at it, and gave orders about it, never taking off his robes and laying hand to the work himself. One must touch the trowel and spade to get the currents of electric freshness that flows from earth, and the nearer one can come to doing everything for himself, the more sheer, undying pleasure is in his life. The only reason I ever have to wish my-

self a man is that I can't plow. We hire it done, and that garden never has been plowed in right time or way since we owned it. But I don't want to stir myself up thinking about it. I want that garden in good tilth three feet deep, and decline to be satisfied with anything short of it, yet I fear I shall be six feet deep myself under ground before it comes to pass.

We want some Chinese for our gardens east. The complaint of the market gardeners out at Belmont, the kitchen garden of Boston, is that help is so poor and so high they are discouraged trying to make a living. White races are not fond of digging, and they may as well relinquish the spade to John Chinaman. If there is a race left on the face of the earth trained to take satisfaction in work rather than playing base ball or hanging round campaign quarters, with cheap Derby hats and shoulders up to its ears, it's a pity to spoil its good intent. I can appreciate the Chinese, who, being born to work for a living, wisely conclude to take comfort in working. I inherit that liking myself, and would rather work full force twelve hours a day than go yachting or attend a literary lawn party, and since reading of Sir JOHN LUBBOCK'S

bees, that work untiringly sixteen hours a day, I don't think much of human beings. To make the connection good, the first point is that we want more work in the garden.

Of the bright lovely flower faces that win us from the vexations of life, the annual which has taken the popular fancy the last year has been *Salpiglossis*. The clusters of cut flowers on sale on Tremont street drew gazers, like bees. The velvety, firm petals, streaked, veined and hair-lined in cross-hatching of blue and crimson, with twenty intermediate shades, wore subdued splendor of a lasting kind. Imagine a *Petunia*, velvety as a *Gloxinia*, shaded and streaked more brilliantly and finely than the *Marvel-of-Peru*, and you get a faint idea of this neglected annual, not the least of whose good qualities are that it is easily grown as Balsams, and flowers with endless variety, scarce two blossoms alike. *Salpiglossis* should be one of the stand-bys for the garden, and I don't know where one can find more brilliance in a package of ten cent seeds than from this. It is half-hardy, like *Asters* and *Ageratum*, but blooms indoors till late if fed with manure water, and is a very dressy flower for many purposes.

The new Ivy-leaf *Geraniums* take a place at once as desirable for their flowers as they have been for foliage and drooping habit. A glass of beautiful rose-colored flowers, like *Lady Washington Geraniums* without the markings, caught my eye at one of the most fashionable florists' in Boston, the other day. The size, freshness and clearness of tint were admirable, and Mr. CALDER said that it was an improved Ivy *Geranium* not yet named. Most of the basket *Geraniums* have purplish-pink blossoms, which are no addition to the plant, but this, with its rosy bells an inch across, must be perfection for window baskets.

For a window or pillar plant out of doors, by all means, add the *Maurandya*. An improved ornament to the lawn, last year, was a rustic basket of this plant set on a large drain tile upright in the turf, and a prettier thing than the basket overflowing with the exquisite taper trails and tendrils of this fairy Ivy, hung with delicate purple bells, I never hope to see. It was a movable ornament, taken out doors or in, as occasion served, but whether hanging at the east window, the

hemp cords twined with its luxuriant length and the basket hidden in starting sprays, or in its half-shaded nook out doors, almost concealing its rough pillar with its garlands, it was the most graceful plant I ever saw. It had no care beyond the plunging the basket every morning in a tub of water, shading from noon sun, and watering with flower fertilizer once a week. It was the grief of the season, that when left, unavoidably, to the care of others for a fortnight in autumn, it was allowed to become frosted and shorn of its beauty.

As for shrubs, I am tired of the selection which obliging writers for the garden recommend to us, a list which begins with *Japan Quince* and ends with *Weigela rosea* and *Hydrangea paniculata*. I am dead tired of hearing the virtues of that *Hydrangea*. Not that it isn't a good thing, and one no garden should be without, for few shrubs keep in bloom two months, making as fine a show as this. Treat it well with manure and coal ashes, stirring the soil well before it buds, and the plant will surprise you, being absolutely a cone of white blossoms, with just green enough to relieve it.

The *Japan Quince* deserves better than to be starved and neglected as it is, or crowded in a row. Plant it by itself, in a sunny spot on the lawn, cultivate like a hill of Corn, and in a few years you will have a mound of flowers every spring, ten feet across the base, eight feet high, and seeming to glow in the sun with its rich, fiery scarlet flowers from top to turf. One in a farmer's door yard, which had been so grown, was a revelation, and would have courted distinction on a king's terrace.

But we want something else, and the *Weigela* wants improvement anyhow. It looks faded in its dull pink and white, and soon grows shabby in the sun; it has no perfume, does not tempt one for cutting, and its season is soon over. Better far have the old flowering Almond, which never will cease to be a delight.

If you want something that will pay for pains, get a *Wistaria* and grow it a standard instead of a vine, or on a trellis on the lawn, where it will flower lavishly in June, and, if well fed, keep lingering blossoms through August and September.

The double Chinese Plum, *Prunus triloba*, with pink flowers, is attractive as

the Almond. The *Daphne Cneorum*, besides its pink, fragrant flowers, is ever-green and hardy.

The white Tree Honeysuckle is a rapid growing thing, which, like the *Wistaria*, will clothe a new lawn with shade and foliage before trees amount to anything.

By all means, pick for shrubs that have handsome fruit as well as flowers, and give a show for the autumn. The Tree Cranberry, *Viburnum opulus*, gives double account of itself, with white flowers in spring and red berries in fall.

Cratægus pyracantha is recommended for training against the wall of a house, or a fence, and its berries light up the autumn and winter scene.

Laurus Benzoin should be on the list of "best," as it has triple virtues. A low shrub or bush, from three to four feet high, it has bright yellow blossoms, red berries, and the whole plant is fragrant, like its name. But I see these introductions to new friends and to old ones estrayed is an affair not of one article but a dozen.

SUSAN POWER.

A BED OF PANSIES.

Our Pansies were wonderfully successful last summer. The early rains which nearly destroyed the Corn crop, only caused them to shoot up rapidly into strong, luxuriant plants. They seemed to have determined to show the town

and great pyramids of solid Pansies, and sent them to the neighbors, we remorselessly beheaded every blossom in the bed, but in a very short time they were back again more numerous than ever, hanging their dainty heads to conceal a sly laugh at our astonishment. We were completely defeated, but the Pansies and our neighbors enjoyed our discomfiture, and we managed to bear our humiliation with becoming resignation.

So, the Pansies grew and multiplied while, with the keenest pleasure we watched their progress, and thought beautiful thoughts, tinged with the rich colors of their blossoms. Early in the morning they lifted their sweet, modest faces to greet the rising sun, all day they followed his flaming course through the heavens, and when his rosy visage was dipping below the horizon bathed in sunset splendors, a little sea of Pansy faces watched the gorgeous scene, and seemed to drink in the brilliant colors of the west. Those little faces spoke to us of God. No human skill could produce this beauty, only the divine mind could design their graceful forms, only the divine artist could pencil their exquisite colors, blending always in perfect harmony, shading into the most delicate tints of white and blue and golden yellow, or deepening into richer crimson or purple or inky black. Those little flowers were mirrors of the divine mind, they reflected the divine thought. What beautiful thoughts God thinks! How gloriously He crystallizes them in material forms that man may share in the joy of their beauty, and how thickly He has scattered through the universe those crystals of thought! The very shreds and splinters which dropped



* "ONLY A PANSY BLOSSOM."

what Pansies could do; if such was their purpose they fully accomplished it. They were perfectly irrepressible. The bugs cut down some of the plants, and we attacked the remainder when they bloomed with the scissors. We made bouquets

from the great architect's hand in fashioning the worlds, are run in moulds of ravishing beauty. Old ocean, as he thunders against the crags and boulders of the shore, flings clouds of pearls and flashing diamonds toward the sun ; and as the warring elements of air and water grind the mountains into dust, out of the resultant rubbish rise shapes so fair that we wonder if heaven holds anything more lovely. It is no wonder that the Greeks called the universe *cosmos*, that is, order, beauty ; but it is more than strange that, when God has filled the universe with multiplied proofs of His love of beauty, some who profess to be His servants should think it their duty to banish beauty

from their homes, shape things in angles and corners, move in jerks, effect candor by speaking bluntly, as one would throw a brick-bat, in short rough-cast the home and cobble-stone the highways of life. On the sea-shore we pick up little houses of strange, rare beauty which God has made for various little creatures to inhabit. He surely does not will that man, His noblest creature, should live in coarseness. Beauty is within the reach of all. She dwells in the log house as in the gilded palace. She is a chaste and simple maiden, and where taste and purity abide, there she is content. She is the King's daughter, and wherever she goes His smile beams upon her. W. H. S.

WANDERER-LIED.

Mine are the paths few choose to tread,
Through quiet valleys, green and low,
Encircled by the shelt'ring hills,
As fair as Eden long ago.

Mine are the flowers that sweetly bloom,
Roses that light the woodland way,
Or dainty blooms that shyly hide,
Secure from noonday's scorching ray.

The winds bring tidings of the hills,
Whose misty peaks I dimly see,
Where bloom the Violets and Blue-bells—
Heights you shall one day climb with me.

Mine are the carols wild birds sing,
Watching their nests in wood or lea ;
Mine are the songs the rivers know ;
Mine the deep voices of the sea.

Mine the soft sighs the idle winds
Wake in the Elms 'neath summer sky ;
Mine the deep anthems Pine woods chant,
The ocean's roar when winds are high,

The beauty of the cloud and mist,
The blue sky when the sun is bright ;
Mine the calm light of friendly stars,
And solemn quiet of the night.

And often, on my chosen path,
A fellow-pilgrim walks with me,
We talk of strange lands we have seen,
Or stranger lands we yet shall see.

I am contented thus to roam,
And let the world and time go by—
Many a king would leave his throne
To be as free from care as I.

MARGARET HUSTED.



FOREIGN NOTES.

AN AMATEUR'S DIFFICULTIES.

From an article bearing this title, in *The Gardeners' Magazine* the following extract is made:

If plants could speak, we fancy that many of those belonging to amateurs would cry out with TENNYSON'S lotus-eaters, "Let us alone." What with pottings and repottings, prunings and stoppings, deluges of water and overdoses of manure, many a poor green thing finds its pot turned into a small pandemonium with a hole in it; and then, completely mystified at the astonishing amount of kindness in humanity, it withers away and dies. To tell the truth, the present writer is haunted by the ghost of many a good plant he has unwittingly assassinated in this subtle manner. What a superfluity of benevolence he has lavished on Azaleas, Fuchsias and Ferns! How regularly he watered them; how tenderly he has tried to make their drainage delightful! Then, how solicitous he has been that they should all enjoy a surfeit of excellent manure! He has loved them, watched over them, dreamt about them. Yet where are they all? Their miserable remains have gone into the great sepulchre of mother earth; they were, in fact, killed with kindness. There is no society for the prevention of cruelty to plants; so the only thing they could do was to die.

A pot is a plant's prison, not its natural home; yet it will do its best to live and flourish in confinement as long as it receives judicious attention. Many things, of course, under skilled superintendence produce much finer flowers in pots than they would in their native state. But one thing a plant objects to is to have its privacy disturbed more than is necessary. For instance, it dislikes to have a five-fingered enthusiast continually turning it out of its only home, and shaking hands with its roots under the pretence of doing it good by repotting it or looking after its drainage. Many amateurs, indeed, have a perfect mania for repotting. I know that I myself was vividly afflicted with this loamy lunacy when I first turned to

that excellent art, floriculture. Directly I bought anything, out it came from its pot; and when, after several attempts, I had succeeded in torturing it into another pot with tolerable drainage, I almost imagined that it ought to flower away forthwith in return for my attentions. But, after a time, when all the leaves dropped off, and when the thing looked like the ghost of a Birch broom or a melancholy sign post to a floral cemetery, then I found I had made a mistake. I looked on its withering form with sorrow, and was floriculturally unhappy. Thus my friends came to recognize, with harmless humor, that a plant was doomed directly I set about doing it any good. Perhaps, like many other people, I was under the impression that plants eat away the earth in a pot, and that unless there is a frequent renewal of soil they will perish for want of nutriment. This was a slight mistake. The fact is that, taking the case of a plant in a small pot, there is hardly any appreciable diminution of soil from one end of the year to the other. Horticulturists have made numerous experiments to prove this. For instance, there is a case on record of a small Willow which was planted in a tub. The earth used to cover the roots had previously been dried in an open oven and weighed, the weight being about two hundred pounds. The Willow remained in the tub for seven years, receiving no water but rain; it flourished, and, of course, increased in size and weight. At the end of the seven years it was taken out of the tub, and afterwards the soil in which it had been growing was dried and weighed. Then it was found that the tree had consumed only a few pounds of earth during the whole of the time. Thus we may readily conceive that a small Fuchsia in a five-inch pot uses for its growth only a small fraction of the actual soil during the course of a year. The plant lives chiefly on water and on the carbonic gas which its leaves inhale from the atmosphere.

But a difficulty arises when the plant pushes its roots to the side or through the

bottom of the pot, so that they mat together and rot. It is in such a case that repotting is really required, and when this operation is performed the roots should be disturbed as little as possible.

SOOT-WATER.

The following remarks about making and using soot-water are made by "Old Delver," in *Gardening Illustrated*:

When made sufficiently strong and used in a clear state there is no other fertilizer, either solid or liquid, that is so well suited for amateurs' use as soot-water, as it is gentle in its action and sustaining in its nature. This is not the case with the majority of concentrated manures, for if they are used slightly in excess, serious consequences are often the result. When a regular supply of soot-water is required there should be two barrels, or other receptacles, in which to make it. A cask holding about thirty gallons is very suitable. In one of these place one peck of soot, and then fill up with water, and keep it stirred twice a day for a week. In ten days it should be ready for use, but it is necessary that it should be quite clear before using it, or there will be a settlement of the solid matter on the soil. A better plan is to put the soot into a coarseessian bag and place it in the water. Tie a strong piece of string to the mouth of the bag, and have one end of it fixed on to the edge of the barrel; the bag can then be moved about in the water, for the purpose of mixing it with the greatest ease. As soon as one lot is ready, another should be in course of preparation, so that with a little forethought a regular supply may be obtained. As regards how and when to use it—as an old practitioner, I can only say that when given regularly when the plant is in active growth I don't know the plant that it would harm, but I have known it benefit a vast number. Even such delicate-rooted plants as Erica and Epacris I have kept in splendid health in the same pots for seven and eight years by the aid of soot-water, and such plants as Callas, Camellias, Azaleas and Roses, may have regular supplies the whole year round. Such subjects as Fuchsias, Pelargoniums, Cyclamens, Primulas and Ferns are greatly benefitted by it while they are in active growth. Plenty of soot-water,

whenever the soil about the roots is dry, will send green-fly and other enemies to the roundabout; therefore I say, use it, and keep your plants healthy and your mind at rest.

TRITOMA LEAVES USEFUL.

The *Revue Horticole* mentions that the leaves of the Tritoma, which it is customary to throw away, can be employed with good advantage in tying buds and grafts, and fastening plants to their supports. For this purpose they are cut and dried and stored in a dry place; when wanted for use they are merely moistened, and are then serviceable. One advantage this material has for tying buds is its elasticity, which is such that a bud is never "strangled" by it, if left too long when the plant is rapidly growing. Tritoma uvaria, with its long leaves, is one of the best species of the genus for the purpose.

ROSE MINIATURE.

The same journal informs its readers that this new Rose of M. ALEGATIÈRE, is the most remarkable of all the Polyantha varieties. It is the smallest of this group; but that which makes it exceedingly meritorious is its profuse blooming habit and the beauty of its flowers, which continue to open all through the winter. The flowers are rose-colored, pencilled with carmine. Treated specially for winter blooming, the plants will give an abundance of bloom all the winter season. Planted in the borders in the open ground, they form a beautiful ornament. The abundant foliage enhances the beauty of the flowers.

WELL-GROWN CYCLAMENS.

The *Journal of Horticulture* thus notices the Cyclamens raised at the Aigbarth nursery of R. P. KER & SONS: "At the present time, middle of March, there are thousands of small plants growing in two-inch pots, the earliest with three or four small dwarf leaves, and the remainder with one and two each. They are grown moderately warm in a light position to keep them dwarf and compact. The earliest of these will be repotted until they are placed in six and seven-inch pots, and will by autumn be from one foot to sixteen inches through. Such was their condition last year, and many of the

plants carried from fifty to a hundred flowers each. To attain the best success the plants must be raised annually from seed, kept growing the whole season without a check.

AZALEA DEUTSCHE PERLE.

A correspondent of the *Journal of Horticulture* remarks that "those who have not yet obtained *Azalea Deutsche Perle* should do so at once. It is without doubt the finest semi-double white variety that has yet been raised. The flowers are of large size, pure white, and their beautiful shape will commend them to all who have many bouquets to make. For early forcing *A. narcissiflora* is the variety relied upon, but its greatest defect is its poor, badly colored foliage. *A. Deutsche Perle* has fine dark green foliage, flowers very early, and when well known will certainly be the most popular white variety for early forcing."

STATICE SUWOROWII.

Another writer in the same journal, says that "*Statice Suworowii* is a charming plant when well grown in five and six-inch pots for purposes of decoration during the summer months. At that period of the year it is totally distinct from other plants in flower, and is at once striking and effective in any arrangement of plants. Those who have effective and telling groups of plants to arrange either at home or in the exhibition tent should give this plant a trial, for in such arrangements its slender stems bearing its light pink flowers stand out boldly. It is easily grown. The seed should be sown in heat and the plants pricked off when large enough, and then potted into three-inch pots, and from them into the sizes named. It will do well in any moderately rich fertile soil. Care must be taken not to grow the plants too warm. They must be gradually hardened to

greenhouse treatment, and later in the season to the cool airy conditions of a cold-frame. The treatment that will suit *Rhodanthes* after they are about one inch high will suit this plant well."

THE PAST WINTER IN ENGLAND.

The average temperature for February of the current year is 5° lower than it has been during the past century, and that for March, is, so far, expected to show a still lower average. But not only in Europe has the weather been severe, for even in the Tropics the cold season has been more true to name than is generally the case. Calcutta is by no means noted for its chilly temperature, and yet a thermometer placed in an exposed northerly position registered as low as 36°, the lowest temperature ever heard of in or near that place. In Florida the Oranges, Lemons and Bananas have not had a good time, the fruit, and in some cases even the trees themselves, having been destroyed. Even in the West Indies they have had something like a real Christmas at last, old top coats being at a premium, and even jokes about snow on the hills were not laughed at as an absolute impossibility. In the days of Clusius the weather in France was so severe that wine was sold in lumps by weight, and in the year 1700 in England the thermometer fell to 31° below zero, and one is not surprised to read that "all garden plants were destroyed," since even the bells in the churches were cracked or broken into fragments on being rung! Our present winter is unique in its coldness apart from actual frost. During 1860 and 1880, for example, we had very severe frosts; but this year's cold is due rather to a long-continued depression from say August to March rather than to extreme depressions below freezing point. The occurrence of these world-wide cycles of cold does not appear to be easy of explanation.

F. W. B., in *The Garden*.



PLEASANT GOSSIP.

PLANT QUERIES.

Please give me some information, in the next issue, on the following questions:

I have a *Cereus grandiflora* which was started from a slip taken last July; it was rooted in common garden soil in a tin fruit can, about the size of a five-inch pot. It has grown two leaves or stalks, one about twelve inches long, the other about six inches. What shall I do with it this summer? Please inform me if it ought to be repotted, and, if so, how large a pot to use, also, what kind of soil?

Ought *Geraniums* to be cut back severely when bedded out in the spring?

Can you inform me where I can procure seed of *Mesembryanthemum testiculare*, *M. densum* and *M. tigrinum*?

C. W. W., *Strafford, N. H.*

The present is a very good time to re-pot the *Cereus* if it has filled the soil with roots, otherwise it may be left until another year. A good soil for the purpose is composed of equal parts of loam, leaf-mold, sand and old well rotted stable manure. The plant can be kept in the greenhouse or window where it has been, and a frame should be provided for the support of the new growth.

Old *Geranium* plants can be shortened back one-half of last season's growth.

Seeds of *Mesembryanthemum tigrinum* are offered by HAAGE & SCHMIDT, of Erfurt, Germany, and perhaps they may supply the others, though not named in their catalogue.

PRUNING THE RED RASPBERRY.

Should the canes of the Red Raspberry be shortened in?

F. A.

Shortening the canes of the Raspberry favors the stronger development of branches and the fruit they produce. The directions on this point given in a prize essay, published in volume 7, page 77 of this MAGAZINE, are these: "As soon as the growth is two and one-half to three feet high, and not more, go through the field and pinch off the tips of all the canes. A week later go over again, nipping off all the tips overlooked, or those that were too small the first time." FULLER, in *The Small Fruit Culturist*, says, "Because no other pruning, except cutting out the old canes, is generally practiced, it is no sufficient reason why it is not necessary, or

that it would not be beneficial. The bearing canes should be pruned in the spring by heading back the leading shoots, and shortening the lateral ones."

THOMAS, in *American Fruit Culturist*, has this in reference to pruning: "When the new canes have reached a sufficient height the following summer, the tips should be pinched off, to prevent their growing taller, which will cause them to become stout and thick, and to send out side shoots, which in turn should also be pinched back when they have grown a foot or so in length, being shorter above and longer below." * * * "The Antwerp may be pinched back at three or four feet, but usually this is omitted, in which case they need stakes." Thus, three courses are practiced: 1st, no pruning, 2d, pinching back the growing canes and their branches, and 3d, cutting back, in the spring, the bearing canes and their branches.

INSECTS ON ASTERS.

I have planted your seeds for the past three years, and they have given satisfaction in every case, except the Asters, and that was no fault of the seed, for they came up all right and were doing splendidly until a small beetle-like bug made bunches of web all around in the small, tender leaves in the center of the plant and destroyed them. These same bugs also attacked my *Calliopsis*, and ruined them, but not until I had some beautiful flowers from them. They are strange insects to me, as I have never seen any until last summer; the first appearance of them is black, but when the sunlight falls full upon them as they move about, they appear to change to a rich maroon or wine color.

C. B. SEARS, *Emporia, Kansas.*

These insects can be destroyed by the use of insect powder. Mix some of the powder in a little water, and scatter it over the flowers with a whisk-broom.

EDGING FLOWER BEDS.

In your June MAGAZINE of 1885, you speak of there being a more excellent way of edging flower beds than with boards and stones. I am anxious to learn a better way. Please answer through the MAGAZINE as soon as possible.

MRS. A. G. W., *Winnebago City, Minn.*

In the February number of this year, page 52, a correspondent describes an edging of Pinks, which is surely better

than stones or boards. Other plants can also be used, such as the Sea Pink or Thrift, *Armeria vulgaris*. Then, there are some annuals that are appropriate for this purpose, such as Sweet Alyssum, *Ageratum*, *Chænostoma fastigiata*, *Fenzlia dianthiflora*, *Lobelia erinus compacta*, and Mignonette. The Double Daisy, *Chamæpeuce diacantha*, *Glaucium corniculatum*, and other low-growing perennials can also be used.

STREPTOSOLEN—MONTBRETIA.

I would like to know something about *Streptosolen Jamesoni* and *Montbretia crocosmæflora*.

L. W. B.

Streptosolen Jamesoni is a valuable greenhouse plant. It is of shrubby habit, ovate, rugose leaves and large terminal heads of showy, orange-colored, tubular flowers. Growing wild in New Grenada,



[STREPTOSOLEN JAMESONI.]

the plant attains a height of four to six feet, bushy in form, and densely covered with its small leaves. The flowers are nearly an inch in diameter, with a narrow tube about an inch in length. They are borne in large panicles, terminating almost every shoot. The flowers vary in color from a bright orange-yellow to a deep reddish-yellow. It succeeds with

ordinary treatment in a warm greenhouse. The engraving shows a terminal portion of a head of flowers.

Montbretia crocosmæflora is a bulbous plant, said to be the result of a cross between *Montbretia Pottsii* and *Tritoma*



MONTBRETIA CROCOSMÆFLORA.

aurea. The plants grow to be two or three feet high, the foliage is similar to that of the *Gladiolus*, and it also resembles that plant in its mode of flowering. The flowers are two inches or more across, and of a deep, rich, orange color. The bulbs require to be potted early in spring. A good sandy, loamy soil is best, and good drainage should be afforded. After the foliage appears attention must be given to the supply of water, and when the plant is well advanced an occasional watering with weak manure water will greatly assist the blooming.

HIBISCUS SEEDLINGS.

In 1884 I procured seed of *Hibiscus immutabilis* and raised a number of plants, but have had not one bloom or even a bud. A number of the plants I wintered in the cellar last winter and brought them out in spring and planted in the garden in a sunny spot, others were planted in partial shade. Some I wintered in window garden at a temperature averaging 45°, and these were planted out in summer, but with the same result; all were healthy plants, seemingly. Will you tell me, in next number of the MAGAZINE, what to do with them to make them bloom?

L. B. T., *Brantford, Ont.*

We have found that these plants require age before they bloom. The proper course now to take is to shorten in the branches and to repot the plants the last of this month. They can be kept in the

greenhouse through the season, or for a few weeks of summer may be plunged in the open border in their pots. Bring them into the house again early or as soon as the nights begin to be cool. They will probably bloom next winter.

DAHLIA—GLADIOLUS—BEGONIA.

How may Dahlias grown from cuttings be kept through the first winter, the bulbs being so small as to dry up?

How may the hardy Gladiolus Lemoinei be increased?

Diadem Begonia, mentioned in the MAGAZINE November, 1884, where can it be obtained?

The Dahlia tubers can be preserved through the winter in a mixture of leaf-mold and sand, kept in a moderately cool, dry room and secure from frost.

Gladiolus Lemoinei multiplies itself by the formation of new bulbs at the base of the old ones, the same as others of the cultivated varieties.

We cannot say where Begonia Diadem can be procured.

GLADIOLUS.

What is the difference between Gladiolus Gandavensis and Brenchleyensis?

M. J. G., *Albion, Iowa.*

The flower of Gandavensis is a bright orange-red, with a yellow throat. In Brenchleyensis the yellow throat is less conspicuous, and the prevailing color is a bright vermilion scarlet or flame color. The habit of the latter is dwarfer than Gandavensis, the leaves and flower stem being shorter, and the flowers set closer in the spike; also, the foliage is darker. Brenchleyensis is far the finer variety.

PASSION FLOWER.

Will you tell me how I should treat the Passion Flower, *P. Smithi*? MRS. E. C. R., *Victoria, B. C.*

The plant should be potted in a light, rich soil, with good drainage, and be given a full exposure to the sun, and be supplied with water according to its growth. At first use a small-sized pot, but when well started shift it into one of larger size, say eight inches in diameter, and supply it with a good trellis for the shoots to run on. The temperature of a living-room will suit it.

AN EVERGREEN FERN.

Please name this plant. I found it full grown April 8th, in the woods. Others not in sight which cover the ground in summer. BOSTON SUBURB.

Accompanying the above note were a

few pinnules of *Aspidium spinulosum*. This Fern is full grown in April, because it endures through the winter.

THE SPARROW AGAIN.

Having come to the conclusion that Mr. Sparrow has hardly received fair play in the controversy as to the propriety of his being allowed to take out his second papers, I will make no apology for presenting the other side of the question for consideration.

I have read, with no slight interest, the recent articles in VICK'S and other periodicals, upon the subject, and, as anything adverse to successful gardening hits hardest the amateur, or others who practice it upon a small scale, I had imbibed a certain degree of prejudice against the pugnacious rascal, and had made up my mind that "the sparrow must go;" but there is no unmixed evil in this world, and a doubt has been suggested as to whether even the sparrow may not have beneficial functions assigned to it in the economy of nature. This doubt first dawned upon me on finding the following sentence in HENDERSON'S *Hand Book of Plants*: "In nearly all the large cities in this country, since the introduction of the European sparrow, though in part a seed-eater, there has been a marked absence of the measuring worm, Rose slug and other caterpillar-like insects," and I rise to inquire if we may not possibly have been too hasty in our unqualified condemnation of the so-called pest. Have any steps been taken by the several State or other horticultural societies for co-operative and systematic collection of facts, such as the capture of the brigand at various seasons and an inspection of the contents of the crop; it may be found that the good he does will more than counterbalance his evil propensities, and we may find the sparrow to be not such a bad fellow, after all.

R. CALVERT, *La Crosse, Wis.*

THE THIRTY-FIRST OF MAY.

To-day sweet Spring has kissed her buds,
And said good-bye to all her flowers,
And whispered to them of June's birth,
Of warmer airs and shining hours.
And, thus, the faint regret we feel,
The fleeting touch of sorrow,
Is banished with this sweetest thought,
The Summer comes to-morrow.

A. L. T.



SCENE IN A CALIFORNIA GARDEN.

A CALIFORNIA GARDEN.

A letter dated February 24th, from ALICE P. ADAMS, of Alhambra, California, who writes of the Arrowhead Hot-springs, in this number, and whose other contributions to these pages are favorably known to our readers, was accompanied by a photograph from which an engraving has been prepared. The few lines below from this letter, are explanatory:

"The fountain is just in front of the lawn, and is surrounded by Callas and Narcissus, with a border of summer-flowering Oxalis. The Pond Lilies in the basin are just starting. The Palms were set four and one-half years ago and were then about ten inches high. They have grown remarkably well, and present quite a tropical appearance from our veranda. The Century Plant will probably bloom this summer, and we shall be glad to get it out of the way, as it is so large that it encroaches seriously on our drive and walks."

The residence is on a fruit farm, a description of which was given in a former volume of the MAGAZINE. In reference to the Orange crop of this season, is the following statement:

"We have been and are still very busy with shipping our Oranges. I will send you some specimens, and hope Jack

Frost will not taste them before you do."

The specimens referred to were duly received, and in prime order; they were the Washington Navel Orange and the Mandarin. The latter a small, smooth-skinned, perfumed, sweet fruit, and the former a large fruit, averaging from three to four inches in diameter, the pulp soft, melting, sweet and rich, the most delicious Orange we ever tasted.

The figure in the picture is that of Mr. ADAMS, the proprietor of the place, and who lately had charge of the San Gabriel collection of fruits at the late exhibit of Citrus fruits, held in Chicago from the 25th of March to the 25th of April. Mr. A. having spent many years in business pursuits in eastern cities started his present fruit farm a few years since without knowledge of the business, and has become one of the prominent fruit growers of that region, thus illustrating a self-relying, enterprising spirit, and demonstrating the fruit-producing capabilities of Southern California.

We trust the fruit-consuming capacity of the population of this country may always prove sufficient to reward the labors of fruit-growers in all parts, and that the semi-tropical products of Florida and California and the hardy fruits of the North may supplement each other.

A PLEA FOR THE OLD FLOWERS.

Why not? Nobody thinks of them. Only yesterday you were looking over the newly arrived catalogue and longing, ah, how vainly, for the last new Rose just out. But your purse was too short and the price, perhaps, too long, and you decided to wait just one year before you ventured. Well, it would have been an addition, no doubt, to your already well-stocked window or garden bed, and quite the envy of half of your neighbors, but you must wait. I mildly suggest, as a compensation, that you take one of the old-time Roses in its stead, but you scornfully reply, "out of date."

Well, may be, but like the old songs, they will come up in memory at least sometimes to be recognized and welcomed by the heart that has traveled back. Ah, how far, to the old garden bed under the hill, where bloomed such a medley of lovely and lovable old-fashioned flowers. Our grand-mother's garden! Only that, and like her, completely "out of date."

Will you go back and look at it with me, fair reader? Down the long length of it, from end to end, is the chief and much admired bed of Tulips, Hyacinths and, at one end, a wee, sweet spot of white, blue and yellow Crocus. First came they, those shy beauties that set all the air alive with fragrance, and the bees half wild with joy. A bed of English Saffron too, from which the old hands would carefully take each yellow thread for a cup of fragrant tea such as only she could make. Easter brought the nodding Daffodil and great yellow Easter flowers, and last, but not least, Hyacinths, blue and lavender, white and pink. But when the Tulip bed was all aglow with nodding wealth of yellow, purple and gold, how then? None could withstand the brilliant pageant. Old "Parrot-tail" might bring up the rear, but vied with "Sir Joseph Coat" for precedence. Down the long lane of walk was hedged a line of—not Pansies, oh, no,—only a smiling, impertinent row of "Johnnies."

"Don't bring them into our presence," you cry, "you will have ruined our prospect for fine Pansies."

"Calm yourself, then, my friend, they belong only to the past," I make haste to reply, "have in fact marched out of existence and back again into the velvety,

soft-eyed beauty of to-day, which isn't an argument in your favor of the present at all, so don't smile over it."

Somehow the old-fashioned white Lilies of that day laid hold of our heart as none do to-day. You even must admit it. They were so wondrous fair and sweet, and our mother loved them so. From banks of green in the far corners of that garden came fragrance mingled of Thyme, Sweet Marjoram, Lavender, and what not? Some of those old flowers are wrapped now in yellow packages lying in drawers long unused, yet whose subtle scent steals unwittingly still into our presence. Long gone hands gathered for us the parti-colored Pinks, whose spicy odors seem a thing of the past and gave them their old name of Clove Pink.

Out of this old garden of the past has grown for us the new garden of to-day. The old flowers live over again, transformed into a new beauty of their own, intensified, made over again by the new modes of re-production until their old-fashioned ancestors would turn on them a meek eye of wonderment, if they could have a chance. The old Cabbage Roses of yesterday that our mothers used to wear, have given place to the newer varieties of to-day, each as beautiful in its way. And while we do not condemn, but admire and long for, as much as you, the new and rare products of art and nature, we would enter a plea, however humble, for the dear old flowers of long ago. If we cannot have one simple corner set apart for these same old plants of our youth, where we may oftentimes wander as it were down the old paths of that old garden, while we drink in not only the beauty but the perfume of its long lost youth, we will at least keep them green in a corner of memory's garden. H. R.

CANTELOUPES.

Melons were first called Canteloupes from being cultivated at Canteluppi, a villa near Rome, where they had been introduced from Armenia, by missionaries. The name is said to be still in use in some parts of Europe for a class of deeply-ribbed, yellow-fleshed Melons. In this country it is applied to different kinds of Melons in different localities, and the significance of the word cannot be well defined as now used.

FLOWERS ON SCHOOL GROUNDS.

Year before last I was engaged in teaching in one of the schools of Memphis, and reading of your kind offer to schools I availed myself of it and you kindly complied.

I must own, however, my great delinquency in acknowledging the kindness and giving an account of our success. The reason of it was as follows: The way suddenly opened up for me to go to college, and preparations for going to Wellesley so completely filled my heart and hands that I could not find one spare minute to devote to it.

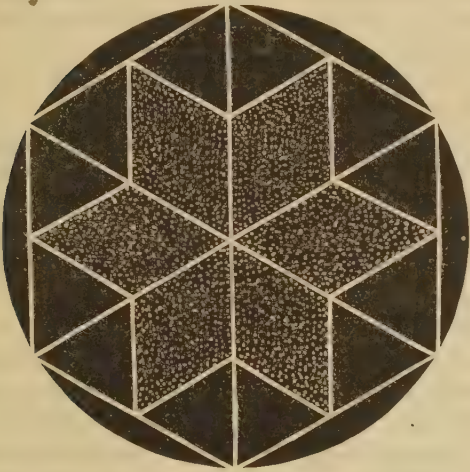


DIAGRAM OF SIX-POINTED STAR.

As to the growing of the flowers. You scarcely ever saw so many bright little faces as when I told what James Vick had done for us; they voted thanks to you then and there with the package in my hands. And those little boys and girls of six, seven, eight and nine years, eagerly stayed after school to help carry loam after I had laid off a bed at dinner recess with the aid of a jumping rope into a six pointed star, after a man, whom one of the parents had sent, had done the digging.

Perhaps you would like to know how to lay off a star like ours.

Describe a circle; inscribe hexagon; draw diagonals; bisect diagonals and sides; join points of bisection.

We placed in the center a large Geranium, and just now I do not remember exactly the order of the other flowers. I think Petunias came next, and the California Poppy, etc., Pansies came near the outer border and Sweet Alyssum was the outmost border.

In an oval-shaped mound, on the other side of the walk, we planted Oats with great ceremony in letter-shaped drills to form the words "Look Up." This was a great success.

I had the opportunity of teaching beautiful lessons of industry, unselfishness, scattering seeds of kindness, etc.

We managed to keep the grass and weeds out very nicely until the last week of examination and public exercises. And, although I think I never had the pleasure of seeing one of the flowers blossom, yet I had accomplished my object, which was moral teaching after all, and the good work lived after, for, as they wrote me, the principal took it up the next year.

M. E. M., *Memphis, Tenn.*

MY LAST YEAR'S GARDEN.

As we cast our glance backward and review the experiences of the past year in floriculture, we are better qualified for the work before us. We can see wherein we have been successful or otherwise. While there are old established favorites to which a place is always assigned each year, I change somewhat their arrangement and add something that I have not cultivated before, or some novelties for trial. The past year my small unpretentious garden plot was far more satisfactory than ever before. The season was very favorable, and everything seemed to thrive. Early in the spring there were several beds ablaze with the gay Tulips, for I had added the previous autumn more than a hundred bulbs of the different species to my collection that was by no means small before. Never had I seen so grand a display of these gorgeous flowers. Yet, they were not all brilliant. Some were pure white, both single and double, and others delicate pink and purple. The Bizarres are distinguished by stripes of scarlet, purple, rose or violet on a yellow ground. The Roses have markings of rose color, carmine, crimson and scarlet on a white ground. The Byblooms are purple and white with feathered edges. All these were a constant delight, while deep-cupped selfs with yellow eye or margined with gold, afforded a pleasing contrast. The fantastic Parrot, with feathered plumage of green, scarlet and gold, added to the attractions of the show, which lasted for five or six weeks.

The Tulip beds were bordered with Crocuses, and here and there appeared spikes of fragrant Hyacinths, and golden Jonquils waved their heads in the breeze. I was so charmed with the early display, coming when few flowers adorned the border, that I planted, last fall, two hundred more bulbs, Tulips, Crocuses, Hyacinths, Narcissus, Jonquils, Snowdrops, &c., so I am anticipating a grand show this spring. Those who fail to plant largely in the autumn of spring-blooming bulbs deprive themselves of a great deal of pleasure. Every winter bulbous flowers bloom in my window garden, and from early spring until hard frosts they bloom in the open ground. As I had added several dozen Lily bulbs to my collection, these afforded new attractions after the Tulips were past. The space filled with the spring bloomers was utilized by annuals and pot-plants after the foliage had turned yellow. I did not do as many do, take up the Tulip bulbs after blooming; only as one was in the way when setting out other plants was it disturbed. Strong growing annuals that strike large roots downward ought never to be planted in the bulb bed, as they draw too much from the nutriment of the soil.

I had been so unsuccessful with ever-blooming Roses taken from the border in autumn, that I left all in the ground a year ago last fall, covering them with sods and evergreen boughs, and a very large snowdrift, later on, was added without leave. The Roses came out all right, with the loss of only one or two, perhaps. Several dozen small plants were added, and these speedily blossomed, so that I had many Roses in variety—Remontant, Hybrid Tea, Polyantha, Bourbon, &c., until severe frosts.

Asters in variety I had far more abundantly than ever before; they were set out in masses, and hundreds would be in bloom daily for a long time. Tulips for the opening of the season, and Asters in abundance for the crowning of the year I must have. A bed of Begonias was a constant pleasure. With me, hereafter, these must come to the front, and the Geraniums take second rank. For beauty of foliage and constancy of bloom nothing surpasses the Begonias, both for the open ground and the window garden. *B. metallica* thrived and bloomed finely

all summer in the border, and has been the handsomest pot-plant in my window during the winter. The Tuberous Begonias are admirable for bedding out, but rest during the winter. They are free from insects and easy of culture, and the time is not far distant when they will be largely used in the open ground. Unlike most other plants, they are not affected by removal to the house.

Centranthus I had for the first time last season, pink and white; the seedlings were set in a clump, and they bloomed continually till late autumn. Everybody praised them. I might mention other plants which gave great satisfaction.

MRS. M. D. WELLCOME.

BOTANY FOR INVALIDS.

In the April number of the *Popular Science Monthly*, Miss E. F. ANDREWS writes very sensibly in advising invalids, or others who frequent health resorts and find time hanging heavily on their hands, to interest themselves with the plants and flowers of the locality.

"The beauty of this pursuit," says the writer, "is that it takes the student out of doors, and throat and lung troubles, as has been truly said, are house diseases. I am speaking, of course, to those who have begun to fight the enemy before he has captured the inner defenses, and who are supposed to be strong enough to do a reasonable amount of walking and some solid thinking.

"Don't try to learn definitions or commit long strings of names to memory from a book, but get some simple work and take it out into the woods with you. Don't worry with writing schedules or trying to draw outlines of the different kinds of leaves; but gather as many as you can; then, by reference to the book, describe them to yourself in botanical terms, and keep on in this way till you can give a scientific description of any plant you see, without the book. In a few weeks you will find that you have mastered, almost without knowing it, the dreadful bugbear of botanical language, and got a good deal of solid pleasure out of the process to boot.

"You are now ready to take up the classification of plants, and to study their habits and relationships, and this is where the real pleasure begins. Don't worry about species at first, but be satis-

fied for a time with referring the different plants to their appropriate orders and genera; specific distinctions are often perplexing, and can be attended to later."

Other good directions are given, and the writer says that the "enthusiasm which the science of botany awakens in all who devote themselves to it, is not its least valuable hygienic factor, for a little genuine enthusiasm will put more life into a sick body than all the drugs in the dispensary.

"After all, the proof of the pudding is in the eating, and, in conclusion, I can only urge my fellow sufferers, who have a moderate amount of strength and patience, to try my simple prescription. As an old negro nurse once said to me anent some 'doctor's stuff,' 'If it don't do you no good, it wont do you no harm,' and will, at least, prove a wholesome diversion from the imbecile fancy-work, and still more imbecile gossip that make so large a part of the daily routine of life at most resorts of health and pleasure."

POTATO POINTS.

Potatoes do well on Corn land that has been manured for the Corn crop. Good sod land can also be used. A deep, mellow seed-bed should be secured by deep plowing and thorough pulverizing. Manure and moisture are essentials. Old stable manure can be plowed in. Some of the best crops are raised with commercial fertilizers.

Plant in drills or furrows, from four to six inches deep, according to the soil, light sandy soils deeper, heavier soils more shallow. Drop the sets and cover them with a couple of inches of soil, and then sow the fertilizer in the furrow, and cover in the rest of the soil.

Go over the field with a common harrow, running lengthwise of the rows, just before the plants push their noses through, and thus destroy all the weeds; afterwards cultivate flat through the season, using only the common cultivator.

One of the best ways to use stable manure for a Potato crop is to plow it in in the fall.

Planting whole Potatoes gives the best yield, according to the trials of the New York Experiment Station; half tubers are next best; quarter tubers next; single eyes yield least. Trials made at the *Rural New-Yorker* grounds favor

cutting to two eyes; other trials correspond with both of these results. The best way is not yet known.

Paris green or London purple, to destroy the potato-bug, is more economically applied with plaster or ground gypsum than with water, and the results are better. Mix one part of poison with one hundred parts, by weight, of plaster. Too much of the poison injures the foliage. If sufficient care is used in the thorough mixture of the substance, Paris green can be used in the proportion of one to one hundred and fifty.

DAHLIAS.

Just a few words for this grand autumn flower. Within the last twenty-five years only two seasons have found me without it. In that time I have gained many ideas in regard to its cultivation, and one especially useful is that of using wood ashes as a fertilizer. Not only a vigorous growth but profuse bloom and brilliant colors are produced by this treatment.

At one time I was obliged to plant them in greensward. This, of course, was just thoroughly cultivated and enriched, but, despite all my care, the worms in the grass roots nearly ruined the Dahlias. Discouraged and provoked, I gave them such a top-dressing of ashes as seemed likely to finish what the worms had left. The result was all I could ask for, restoring the injured plants to health and vigor, entirely killing out the worms in the soil, and also preventing greatly the little brown worm entering the stock and spoiling the buds. These worms can only be destroyed at last by splitting the stalk where they are and taking them out. They are very common here, in Rhode Island, but a stranger to western people, I think. A SUBSCRIBER.

MILDEW DESTROYER.

Sulphide of potash has proved in our practice all that has been claimed for it by the English press as a destroyer of mildew on Roses, Chrysanthemums and some other greenhouse plants. A quarter of an ounce dissolved in a gallon of water and thrown on the affected foliage with a fine-rosed syringe will wholly destroy the fungus, and the leaves will not be injured.

A READER'S NOTES.

I was pleased to see your notice, last month, of the Audubon Society. There should, evidently, be some movement made to persuade our kind ladies into adopting something for ornamenting their persons besides innocent birds. How can a woman enter a church and raise her thoughts to her Heavenly Father, with the murdered innocents between her and her Maker!

We have such a singular condition of weather it may be worth a passing notice. On the morning of the 3d of April we found our trees and shrubs bending under a weight of ice, and each blade of grass seemingly converted into a separate icicle, pointing upwards in a threatening attitude. Not a ray of sunshine, and about ten o'clock we had thunder accompanied by rain, which continued till night, adding somewhat to the ice, and ornamenting the telegraph wires with a fringe of icicles eight inches long, an inch or two apart and as perfect as possible. When night set in and our hills and ravines were illuminated by flashes of lightning, the landscape presented a weird and somber aspect, never to be forgotten. The 4th continued cloudy and cold, and the ice remained till noon of the 5th. I made several excursions to my flower beds and gathered a plate of Pansy blossoms, Candytuft, Adonis, &c., and each occupied its own large crystal palace, in perfect beauty of form and color. They were a sight to be enjoyed but once in a life time. This weather in April, and here, is something wonderful, and reminds me of our old New York winters, for New York is my native State, and Rochester was "home."

Our seasons are changing. Cold weather extends later into spring. Our Peach buds were killed early in winter, as in 1885, also in 1884.

Many of the farmers and fruit growers are now growing Tomatoes. There are from eight hundred thousand to twelve hundred thousand plants within a radius of six miles from Cobden, all in hot-beds, to be set in the fields the first of May, ripening their fruit the latter part of June. Cobden is a small place, probably containing one thousand inhabitants, but there is a great amount of business done here.

The Polyantha Roses are hardy with me, Mignonette, Cecile Bruner and Pa-

querette. I have left them out with a light mulch through two unusually cold winters, and find them green and bright, with new leaves forming on every branch, while the Monthlies are killed to the ground every winter. If I could have but one Rose that one would be Cecile Bruner. It has long buds, almost as large as a Monthly, blooms from April to December, grows vigorously and takes care of itself. Etoile d'Lyon is another good Rose. Coquette des Lyons blooms all summer. Saffrano, Bon Silene, Duchess de Brabant and Isabella Sprunt are all good, and with these one need never look in vain for buds from May to December, in this latitude.

The foliage of Bronze Geraniums can be made much deeper colored by putting a handful of Oak chips in contact with the roots when bedding, also, Oxalis, Pansies, and many other blossoms I have changed materially in color.

J. S., Cobden, Ill.

TURNIPS FOR STOCK.

I have spent some years in England; and, as carefully as I could, studied the ways of practical farmers; most of the time spending about three days of each week among them.

The "Encyclopedia Britannica," speaking of Turnips, says that the intelligence of a farmer can be pretty well gauged by the amount of Turnips he raises; I fully believe this. Now, the average American farmer don't think much of Turnips, but I have tried them pretty thoroughly during the last three years; raising several thousand bushels last season.

I have kept thirty-two head of calves, which will be a year old this spring, through this winter, feeding them with very little else but Turnips and Barley straw; they have had some poor hay, but not a great deal, and a little bran, but only a little.

Intelligent men who have inspected the stock here during the past two weeks, declare that another as handsome lot of yearlings cannot be found in the country, and this is the richest and best farming county in the state. I don't believe there is any flattery in these remarks, and I attribute the rapid growth of the stock and their splendid appearance, more to the judicious feeding of Turnips than to any other cause.

I want to raise, this season, an aggregate of say 15,000 bushels of the different kinds. J. W. W., *East Rindge, N. H.*

SPOTTED CALLAS.

In a late number of the *MAGAZINE* some one mentions the Spotted Calla. I think that people take too much pains with this plant. My first experience with them, several years ago, was a good deal of work and but little bloom. Then I had one or two roots, and now, perhaps, fifty, besides giving to my friends every year. In autumn, when the Dahlias, Gladiolus, &c., are taken from the ground, the leaves of this Calla are beginning to decay, showing that their season of rest is at hand, and I then take them up also. I shake off the soil, dry them some and store them away with other bulbs. In spring they may be potted in small pots, and be started to grow with considerable heat and moisture. I like small pots for them, as they can be slipped out of them without breaking the roots, and they bloom better if the roots are not injured. Mine are planted for a border in the open ground, and seldom a bulb fails to bloom. Unlike other foliage plants, both leaf and flower are finest when grown in partial shade.

A SUBSCRIBER.

WHITE FLOWERS.

Many white flowers are needed in every garden, for we cannot arrange a handsome bouquet without them. Last season I had an abundance of Sweet Alyssum, which was just the thing for baskets. Parson's New White Mignonette is fine, the long spikes show well in a large bouquet. Double and single Pyrethrums look pretty, but I do not admire their fragrance. The neat little flowers of the Candytuft I find very useful, too.

A large Chrysanthemum plant which a friend sent me, last spring, bore flowers of a pure white, which were of the same size as the Pyrethrums. I had a plant of the double-flowered Achillæa, a beautiful hardy perennial. The flowers are pure white, perfectly double and produced in large sprays. The plant is an abundant bloomer; mine was very small when I received it in May, but in August I counted over seventy flowers on it, the same flowers keeping perfect for two months or more. I would advise those who have not a plant of Achillæa par-

mica fl. pl. in their garden to procure one this spring.

A bulb of *Hyacinthus candicans* gave me a deal of pleasure last year. Let any one try one bulb and he will certainly want more. This plant blooms during August and September. It grows from three to five feet high, with spikes of pure white flowers two feet in length. The bulbs throw up strong flower-stems, large spikes of bell-shaped, white blossoms that are very beautiful.

Nicotiana affinis, which bears large, white flowers that open at sunset and are fragrant as Carnations, is a plant that is very attractive. I think the above are nearly all the white flowers I have used in bouquets.

C. G. F.

THE TRUTH ABOUT IT.

"Spring," sang the poet, "budding spring."

Alas! the boughs were bare;
He was himself the one green thing,
For ice lay everywhere.

"Hail, spring, with breezes soft and sweet."

The spring returned his hail;
There came a shower of snow and sleet
Upon a wintry gale.

"Sing, merry birds, in bush and tree."

He read the almanac;
The birds were wiser far than he,
And did not hurry back.

"Spring, gentle"—here he ceased to sing.

Let the sad truth be told;
The while he sang of balmy spring,
He caught an awful cold.

MRS. M. P. HANDY, in *The Century*.

SPOTTED CALLA.

Some one asks how to treat Spotted Calla. I have been very successful with it, and I treat it just as I do Gladiolus; bed out in April, and lift in October and dry off the tubers and store them dry in a dry, warm cellar. Mine increase rapidly and bloom splendidly treated this way, and are but very little trouble, and are very ornamental in the yard in beds.

J. D., *Alexander, Ill.*

BEAUTIFUL HOMES.

The very excellent treatise on landscape gardening adapted to home grounds of small extent, and known to some of our readers as *Suburban Grounds*, by FRANK J. SCOTT, has been re-issued by JOHN B. ALDEN, of New York, with the title *Beautiful Homes*. It is a book of six hundred pages, illustrated by upwards of two hundred plates and

engravings of residences and grounds, trees and shrubs, and garden embellishments. It contains, also, descriptions of the beautiful and hardy trees and shrubs that thrive in this country. *Suburban Homes* was sold at eight dollars a volume, but with its new title, and elegant in every respect, it is now offered at three dollars. We can unreservedly recommend this work to all who may wish to inform themselves on the interesting subjects of which it ably treats. It is the best practical work of the kind ever published.

MUSKMELONS.

Two essays which were received in response to the prize essay question on Muskmelons were well written, practical articles, but both of them failed to supply facts or figures to show that this crop is a profitable one, or can be made so, in the northern states where the field is occupied in advance by southern growers. Both writers agree that a sandy soil is best for this crop. It should be enriched with a liberal dressing of good rotten stable manure spread over the surface and plowed in six or seven inches deep, and the soil harrowed down fine and level.

Mark out the land in squares, six feet each way, and plant the seeds at the crossings of the lines—about a half dozen to a dozen seeds at each place, and this spot should not be raised above the general surface. In addition to the general manuring, one writer advises “a handful of some good fertilizer at each crossing,” thoroughly mixed with the soil; the other advises to “dig out a hole about a foot deep and two feet in diameter, and in this put three or four shovelfuls of some good rich compost, and scatter a handful of superphosphate on each hill after the soil has been put on the manure, and rake it in well; put four or five inches of good soil on the top of the manure or compost, and have it so that when finished the surface will be depressed about

an inch below the general level of the field.” Both describe the methods sometimes employed with the view of hastening the plants, namely: cutting bits of sod, about four or six inches square, and sowing the seed on the inverted sods in the greenhouse or hot-bed. A caution is given about sowing the seeds in pots or boxes of soil, as the disturbance in removal from these receptacles is too great. This sod method, says one writer, “occasionally may succeed very well, but I have tried it, and have never found it as successful as planting the seeds in the hills in the open ground; no matter how much care is bestowed on plants raised under glass, and no matter how much attention is paid to giving them air, they will be tender after all, and if, after they are planted out, a cold wind comes for a day or two, they become stunted and make very little growth for a long time.”

The old rule for the time of planting is a little later than corn-planting time.

In Arkansas, “they prepare quite a large smooth surface at each cross-mark, as early in the season as they dare to risk it, plant a few seeds in each hill, a little one side of the middle. About ten days or two weeks later they make a second planting a little one side of the first. They wait a week or two and then make a third planting in the same hills, and if the season is very backward, or cold and wet, perhaps a fourth planting some days later.” The first planting is two or three weeks earlier than if only one planting is relied upon, and if it succeeds it is so much gain, if not the later planting replaces it.

When the plants are in the rough leaf thin them out to three or four. Keep the land clean by the use of the cultivator until by the growth of the plant it can no longer be used.

In shipping to market pack in barrels well ventilated with holes bored in.

Jenny Lind, Early Christina, Golden Netted Gem, and Hackensack are mentioned as being among the most profitable sorts.



OUR YOUNG PEOPLE.

A WONDERFUL ISLAND.

What wide-awake student of geography can guess its name? It is an inhabited island, the central one of a group, and has an area of about seventy thousand square miles, irregular and rambling in outline, but greater in extent than the whole State of Virginia.

Although surrounded by other islands, a large proportion of its fauna is distinct from any other in the known world. The number of different genera is small, but out of two hundred species of birds found there no less than eighty of these are peculiar to this island. Just imagine, for a moment, eighty kinds of strange birds to be found no where else! Australia may boast of a black swan and a white eagle, but cannot claim all the wonders.

The mammalian order, which, it must be remembered, includes such creatures as suckle their young, like the pig, the whale and the bat, are represented by only fourteen species here, nine of which are peculiar to this region. Besides these is a remarkable ape, the *Macacus niger*, found no where else but in Batchian; and a small, ox-like quadruped, the *Anoa depressicornis*, inhabiting the mountainous districts, and also the pig-deer of the Malays, all very strange and odd-looking animals.

The singularity of species prevailing among mammals and birds is found among the insects. Out of one hundred and fourteen species of butterflies belonging to four important classes no fewer than eighty-six are elsewhere unknown. Of the rose-chafers, or *Cetoniadæ*, nineteen out of thirty varieties are also peculiar. (To those they are welcome.)

To add to the marvel of so many distinct species existing here, is the fact of a total absence of many species common in the surrounding islands as well as elsewhere.

It is also worthy of note that similarities are often to be traced to species belonging to Africa and to other remote regions; and this suggests the possibility of this island, ages ago, having been con-

nected with that continent, while the surrounding islands may have been heaved up by volcanic disturbances at a later period. Such wonderful changes are now known to have taken place in the earth's surface that, where isolated instances of distinct animal or vegetable life are found widely separated, it sets intelligent people to thinking. For instance, the presence of seals and herrings, salt water fish, in the fresh waters of the Caspian Sea, is now considered "unmistakable evidence of its former communication with the ocean, and this probably northwestward with the polar sea, rather than westward through the Black Sea and Mediterranean."

But that is not all. It is asserted that "the fauna of the Caspian corresponds so remarkably with that of the Black Sea on the one side and with that of the Sea of Aral on the other, that it can scarcely be doubted they were formerly in free communication with each other."

All this is very interesting, but we must not lose sight of our wonderful island, but proceed to describe its general features.

Its scenery is said to be of the most varied and striking character. "Some parts of the island abound in gorges, chasms and precipices, such as are nowhere else to be found."

Although very mountainous, one of the principal features to be noted is the "frequent occurrence, along the coasts, and at various heights inland, of beautiful stretches of level ground, often covered with the richest pastures." In many places, even the overhanging precipices, five or six hundred feet high, are completely draped with luxuriant foliage. What a curtain of green would that be to hang before one in mid-air?

The northern part is still highly volcanic, and subject to earthquakes. In one province alone eleven, at least, distinct volcanoes exist. In other districts hot springs, mud fountains and similar phenomena occur. Of its numerous and

extensive lakes the most important one has a depth of about thirty feet, and abounds with wild fowl and fish. Of plants which furnish food for the inhabitants, the most important are Rice, Maize and Millet, the Coffee and Cocanut trees, the Sago-palm and Bread-fruit, the Obi or native Potato, Beans and Sugar-cane. Also, are found in abundance Tamarinds, Melons, Lemons, Oranges, Mangosteens, Wild Plums and Spanish Pepper. The Shaddock, Citrus decumana, a large, orange-like fruit, called by the name of a man who first introduced it into other regions—grows only in the lower plains. Indigo, Cotton and Tobacco are grown. The Bamboo and Ratan-palm are common in the woods, and among the larger trees are Sandalwood, Ebony, Sapan and Teak. The Gemuti Palm furnishes fibers for cordage, and to prove that the people are not behind other parts of the world, it may be stated that intoxicating drinks are prepared from several different Palms.

And right here we stop to learn more about the Sapan tree, and find that it is a variety of Brazil-wood. Looking still further we learn that *brazil* is a Portuguese word, meaning "A live coal, or glowing fire," and was given to the wood on account of its color, and that King Emanuel, of Portugal, gave this name to the country in America because of its producing this valuable wood. It was first named Santa Cruz by its discoverer, Pedro Alvarez Cabral.

There, we've smuggled a scrap of history right into our description of the island, and now we'll go on.

Great portions of the country, especially near the eastern coast, are covered with primeval forests and thickets still unbroken, save where they are traversed by dim pathways or opened by an occasional clearing and village.

And now we come to the inhabitants. Their houses are built of wood and Bamboo, but so insecurely that the winds soon give them a leaning tendency. But this applies only to the forest or inland villages. In the coast regions civilization is more or less advanced. In the beginning of this century the people were still savages, divided into numerous tribes speaking different dialects, and generally at war with each other.

How could the fondness of Christian

nations for their morning cup of coffee work a sudden change in all this? We'll see. About 1822 Coffee culture on the mountain sides was introduced into the north-eastern districts, and such arrangements established with the native chiefs as induced them to manage the plantations. This was the beginning. In 1859, only thirty-seven years, there were twenty-eight village schools, twelve government schools, and one hundred and two mission schools!

In the other extreme of the island—the south-western part—is a city, an important port, containing about twenty thousand inhabitants, which forms the capital of the "residency," as it is called. The mixed foreign element is in colonies under the control of separate "captains," while the native people are under the care of a head priest. Although this class call themselves Mahometans, they worship animals and a certain divinity which has power over fortune and health. A curious government this.

The natives are brown-skinned, well built, have broad, expressive faces, black, sparkling eyes, high foreheads and soft, black hair falling on their shoulders. The men are greatly given to athletic sports, and gambling and cock fighting, but drunkenness is rare. The language of this class is spoken by about three hundred thousand people.

Other parts of this large island are divided into "kingdoms," or "confederations," composed of States which are governed by "chiefs or nobles." In one kingdom alone are about forty of these chiefs with their respective bands of followers, all subservient, however, to the prince or king. He is elected for life; think of that! Elected—not a hereditary sovereign—elected by the chiefs, whose own offices are hereditary in some of the States, but in others any number of the classes "of pure descent" may aspire to that dignity. And now comes the crowning wonder of all—it not unfrequently happens that the State comes to be governed by a woman! What are our long-repressed countrywomen to think of that!

This statement will do to wind up with, though all here written is but as a grain compared to the bulk of interesting knowledge that the curious reader may avail himself of by research, when he

shall have guessed the name or have | of its transposed letters—Leesbec.
read it from the appended word formed |

MARIA BARRETT BUTLER.

THE EMBER GOOSE AND EIDER DUCK.

The Ember Goose is a native of many countries, for it is a winter visitor of the British coasts, is found in most parts of Europe, the north of Asia and in North America. It makes its home not only near the sea, but often on the shores of rivers and fresh water lakes. The bird is large, measuring nearly three feet in length, with



EMBER GOOSE, OR LOON.

plumage of beautiful coloring. The back is black spotted with white; the head black with tints of green and blue, and the under parts of the body are snowy white. The legs are slight, set far back on the body, and the toes are completely webbed, for the bird is a water fowl, loving to dive beneath the water, where it uses its wings as

well as feet when moving about seeking for fish, which form part of its food. It can also fly well, but when walking on the land is very awkward in its movements, hence the name Loon, which is so often given the bird; and it is also as well known by the name of the Great Northern Diver. There are belonging to the same family the Black-throated and Red-throated Divers. The Loon has a peculiar cry, resembling the howl of a wolf, and is heard by some with a feeling of superstition and dread, as it is supposed to be an omen of ill. A strange belief, truly, for why should the cry of these birds be the harbingers of woe more than the notes of the Thrush or Robin, whose sweet songs give so much pleasure, for they are all God's creatures.

Another water-fowl is the Eider Duck, whose fame is world wide, for who has not heard of the Eider down, which is part of their plumage. They are birds of the sea, loving the cold regions of the world found on the Arctic coasts, but not in warm or temperate climates. The size of these birds is between that of a

common duck and a goose. Their nests are made of fine sea-weeds and mosses interlaced with twigs and matted together. In these nests the eggs are laid, and after a time the bird carefully packs them about with the down which with her bill she plucks from her breast. Thus the eggs retain their warmth, if the bird, by any means is called to leave her nest. The down for which these birds are famed is taken from their breasts. It is soft, light and of a gray color, and that which is plucked from a living bird is superior to that taken from a dead one, and, therefore, the down is gathered at the proper time each season from the nests. Down is much used in Germany to stuff the bed coverings which serve in place of blankets. The eggs of the Eider Duck are of a fine flavor, and its flesh is exceedingly palatable, while on the other hand the Loon, or Ember Goose is almost unfit for food, for the meat is tough and unsavory. The Loon is easily tamed, and the Eider Duck shows no alarm when approached by man.

M. E. WHITTEMORE.

EDITOR'S MISCELLANY.

THE ECLECTIC MAGAZINE.

The *Eclectic* for April, besides many other good papers, contained "The Scotch Borderland," by Norman Pearson. The most striking feature of the borderer's character is described as "open handed hospitality which prevails among all classes from the highest to the lowest." This hospitable spirit is naturally the cause of a good deal of drinking. "A characteristic saying is preserved of a certain Armstrong, of Sorbie, who lived somewhere about 1750, and who even then came to the conclusion that it was a better world where there were more bottles and fewer glasses in it. A border minister has told me that he positively dreads his ministerial visits on account of the amount of food and drink which he is expected to consume in each house. Border clergymen of an older generation, however, are unusually free from any degenerate incapacity of this kind, and will drink their share stoutly with the best of their flock. An old-fashioned specimen of this class was once invited to an evening party at the house of a reverend brother, who affected, as he thought, an unworthy moderation. Being asked on his return how he had enjoyed himself, he replied, 'Indeed nae muckle ava'; baabee whust and the leddies cheating; yea tumbler o' toddy wi' twa weemen oot o't.' (Idem Anglica redditum.) Indeed, not much at all; halfpenny whist and the ladies cheating; one tumbler of toddy with two women (sipping) out of it."

In contrast with their hospitality is their clannishness. "There is a story told of a beggar woman who had wandered through a border hamlet asking alms, but in vain. At last, in despair, she exclaimed, 'Is there not a Christian in the village?' 'Na, na,' was the reply, 'we're a' Johnstons and Jairedens (Jardines) here.'"

A NEW MAGAZINE.

We know no reason why a cosmopolitan may not have a home in Rochester, and so thought, no doubt, the publishers of a new monthly literary magazine entitled *The Cosmopolitan*, which was presented to the public, for the first time, in March. It is quite attractive in appearance, with good, clean print on fine paper and good illustrations. The articles are very creditable, being mainly by writers of talent and reputation. The publishers state that it is "a first class magazine," and will embrace a wide field of subjects. We hope the publishers may realize all they hope for in issuing this handsome publication, and that the public may be interested and instructed by it for years to come. Published by Schlicht & Field; price, two dollars and fifty cents a year.

COTTAGE PORTFOLIO.

This new publication consists of twelve finely lithographed plates, containing twelve designs of low cost houses, with forty-three illustrations and explanations. The work is by D. S. Hopkins, architect, who is favorably known to most of our readers by some of his designs which have appeared in our pages. We commend this set of designs to those who may be interested in them, as the work of a skillful, tasteful, practical architect. It is sold for one dollar, and may be had of the publisher, Fred. A. Hodgson, 294 Broadway, New York, and for the sum named it will be sent free of postage to any part of the world.

SPARE THE BIRDS.

Write to the Audubon Society, 40 Park Row, New York City, for their pledge, and sign it.